AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

In the specification:

Please replace the paragraph at page 1, lines 16-18, with the following paragraph:

-- The present application ~~is a continuation-in-part~~claims priority of U.S Provisional Application No. 60/237,171 filed on October 2, 2000. The disclosure of said provisional application is incorporated herein by reference.--

Please replace the previously amended paragraph at page 12, lines 23-27, with the following paragraph:

-- Figure 22A is a drawing showing the amino acid sequence encoded by the rabbit nucleic acid sequence of figure 21 (SEQ ID NO: 11). Also shown for comparison are bovine (SEQ ID NO: 12), human (SEQ ID NO: 13), and mouse (SEQ ID NO: 14) sequences. Figures 22B-C show results of ~~RT-PCT~~RT-PCR experiments. Results of those experiments are summarized in Figure 22D.--

Please replace the paragraph at page 18, lines 15-20, with the following paragraph:

--In particular, suitable VEGF DNA can be obtained from a variety of sources. For example, one source is the National Center for Biotechnology Information (NCBI)- Genetic Sequence Data Bank (Genbank). A DNA sequence listing can be obtained from Genbank at the National Library of Medicine, 38A, 8N05, Rockville Pike, Bethesda, MD 20894. Genbank is

also available on the Internet~~internet at http://www.ncbi.nlm.nih.gov~~. See generally Benson, D.A. et al. (1997) *Nucl. Acids. Res.* 25: 1 for a description of Genbank.--

Please replace the paragraph at page 33, lines 22-29, with the following paragraph:

-- Technetium 99m-sulfur colloid(Tc-99m-SC) was prepared using ~~Cis-Sulfur Colloid~~CIS-SULFUR-COLLOID™ kit(CIS-US, Inc., Bedford, MA, USA) and Tc-99m generator, ~~Ultra-TechneKow-~~ULTRA-TECHNEKOW™ DTE(Mallinckrodt Medical, Inc., St. Louis, MO, USA) according to manufacturer's instructions. The final preparation was filtered through a sterile 100nm filter(~~Millex~~MILLEX™-VV, Millipore Corp., Bedford, MA, USA)(26). This filtered sulfur colloid preparation was used for lymphoscintigraphic studies. Tc-99m-filtered SC was injected intradermally to the dorsal tip of both ears of anesthetized rabbits at a dose of 50μCi in a volume of 0.1-0.2ml using insulin syringe with 27-gauge needle.--

Please replace the paragraph at page 34, lines 1-9, with the following paragraph:

-- Imaging was performed using a large-field-of-view gamma camera (~~Genesys~~GENESYS™, ADAC, Milpitas, CA, USA) interfaced with a dedicated workstation system and low energy, multipurpose parallel-hole collimator with a 20% window centered over the 140keV photopeak. Images were obtained 15 minutes and 1 hour after injection with a 5-minute scanning time and onto a matrix size of 128x128x16. The images included the whole ear and base of the skull. Images were digitally stored in order to quantify the level of radioactive material within the ear. Data acquisition process was identical in all rabbits. Imaging of ears was performed at postoperative day 1 to ensure successful surgical blockade of lymphatic egress, and then 4, 8 and 12 weeks. Animals were kept anesthetized for the duration of the imaging sessions.--

Please replace the paragraph at page 34, lines 20-30, with the following paragraph:

-- To quantitatively compare lymphatic drainage of the injected radiotracers, radioactivity within the rabbit ears were counted by an observer blinded to the treatment group. For this quantification, it is assumed that for a given rabbit, lymphatic draining capabilities are the same for both ears. Same doses of radioisotopes were injected at the tip of both operated and intact ears. With use of workstation system (~~Pegasys~~PEGASYS™ ver 3.4, ADAC lab., Milpitas, CA, USA), radioactivity was measured in 1-hour delayed images. In order to avoid the high concentration of radioactivity at injection sites, we subtracted gamma counts at injection sites from the remainder of the ear, which was used as the remaining radioactivity of the ear. For standardization, the radioactivity ratio of operated vs normal(contralateral) ear, named radioactivity index(RAI), was used to compare radioactivity between VEGF-C and control groups at weeks 4, 8 and 12, respectively.--

Please replace the paragraph from page 37, line 10, to page 38, line 2, with the following paragraph:

-- Samples harvested from the skin bridge and proximal and distal to the skin bridge of the operated ears and from the bridge site of the contralateral ears, were snap frozen in liquid nitrogen 7 days after the second injection of phVEGF-C (post-operative day 13), respectively. Samples were homogenized in lysis buffer (100 mM potassium phosphate, 0.2% Triton X-100) supplemented with a protease inhibitor cocktail (Roche, Mannheim, Germany). Total protein extracts were quantified by the BCA protein assay kit (Pierce, Rockford, IL). Protein extracts (100 μg per sample) were separated on a 12% SDS-PAGE (~~Ready Gels~~READY GELS™, Bio-Rad, Hercules, CA) and electrotransfered onto PVDF membranes (~~Hybond-P~~HYBONDTM-P, Amersham Pharmacia Biotech, Piscataway, NJ), which were blocked overnight with 5% nonfat dry milk in 0.2% ~~Tween~~TWEEN™ PBS (T-PBS). Samples were probed with a VEGF-C goat polyclonal antibody (Santa Cruz Biotechnology, Santa Cruz, CA; 1:500). The membrane was washed 3 times in T-PBS and then incubated with horseradish peroxidase-conjugated anti-goat

IgG(1:5000) for 1 h. Antigen-antibody complexes were visualized after incubation for 1 min with ~~ECL+~~ECL+™ chemiluminescence reagent (Amersham Pharmacia Biotech) at room temperature, followed by exposure to ~~Hyperfilm~~ HYPERFILM™ ECL (Amersham Pharmacia Biotech). Equal protein loading among individual lanes was confirmed after stripping the membranes with ~~ImmunoPure~~ IMMUNOPURE™ elution buffer (Pierce) by reprobing the membranes with an α-tubulin mouse monoclonal antibody(Calbiochem, San Diego, CA; 1:1000 dilution). We performed the same procedure using VEGF-C mouse monoclonal antibody (Human Genome Science, Rockville, MD; 1:500) and horseradish peroxidase-conjugated anti-mouse IgG. Each experiment was repeated at least three times with different cellular extracts. Densitometric analysis was performed (NIH imaging program) to allow for quantitative comparison of protein expression. Results shown are representative of 3 to 5 experiments.

Please replace the previously amended paragraph at page 38, lines 7-28, with the following paragraph:

-- Because the rabbit VEGFR-3 DNA sequence has not been disclosed, we sequenced part of the VEGFR-3 cDNA using degenerate oligonucleotides. Degenerate oligonucleotides were designed from conserved aa sequences NVSDSLEM (SEQ ID NO: 1) and WEFPRER (SEQ ID NO: 2), located 90 aa residues upstream or 40 aa residues downstream, respectively, of the trans-membrane domain of human and mouse VEGFR-3/Flt-4 (Finnerty et al 1993, Galland 1993). The deduced oligonucleotide sequence were 5'-AACGTGAG(CT)GACTC(GC)(CT)T(AGCT)GA(AG)ATG-3' (SEQ ID NO: 3) and 5'-CC(GT)YTC (CT)C(GT) GGG(AG)AA(CT)TCCCA-3' (SEQ ID NO: 4), respectively. Total RNA was extracted from kidney, ear, paraaortic lymph nodes, mesentery, and lung using ~~TRIzol~~ TRIZOL™ (Life Technologies, Inc., Grand Island, NY, USA) according to the standard acid-guanidium-phenol-choloroform method. Two microgram of total RNA were reverse transcribed using random hexamer and Moloney murine leukemia virus reverse transcriptase (MMLV-RT) (~~SuperscriptII™~~ SUPERSCRIPT™, GibcoBRL, Life Technologies, Inc., Grand Island, NY,

USA) according to the manufacturer's instructions. Briefly, the RNA was reverse transcribed in 20µl of reaction mixture containing of 10mM of each dATP, dCTP, dGTP, and dTTP; 0.1M DTT; 200U MMLV-RT, 40U Ribonuclease inhibitor and buffer. One tenth volume of the reverse transcriptase(RT) product was subjected to polymerase chain reaction(PCR) in the presence of the above-mentioned pair of oligonucleotides and Taq DNA polymerase(GibcoBRL). PCR cycles were as follows: 94°C, 2min(once); 94°C, 15 sec; 50°C, 30sec; 72°C, 1 min(30 times); 72°C, 10 min(once). A single PCR product of approximately 470 base pairs was obtained from all the tissues. The PCR product from the kidney sample was subcloned into the ~~pBluescript~~ PBLUESCRIPT™ vector (~~PCR-Script~~ PCR-SCRIPT™ Amp Cloning Kit, Stratagene, La Jolla, CA, USA) for sequencing and probe preparation. Sequencing was performed utilizing simultaneous bidirectional-sequencing technique using ~~Sequwncher~~SEQUWNCHER™ (GeneCodes, Ann Arbor, MI)(MWG Biotech Inc., High Point, NC, USA).--

Please replace the previously amended paragraph at page 39, lines 5-11, with the following paragraph:

--Figure 21 is explained in more detail as follows. Degenerate oligonucleotides designed from conserved amino acid sequences NVSDSLEM (SEQ ID NO: 1) and WEFPRER (SEQ ID NO: 2), located 90 amino acid residues upstream or 40 amino acids downstream of the transmembrane domain of human and mouse VEGFR-3 were obtained. Reverse transciption and PCR were conducted. The resulting RT-PCR product was subcloned into ~~pBluescript~~ PBLUESCRIPT™ vector for sequencing and prope preparation. The product had a molecular weight of about 470 bp as estimated by polyacrylamide gel electrophoresis.--

Please replace the previously amended paragraph from page 39, line 14, to page 40, line 2, with the following paragraph:

--At postoperative day 14, samples were harvested from the bridge site of both ears. Total RNA was isolated using ~~Totally RNA~~ TOTALLY RNA™ (Ambion, Austin, Texas, USA) according to the manufacturer's instructions. The RT was followed by a PCR reaction conducted in a total volume of 50µl that contained 1.5mM MgCl2, 10mM of each dATP, dCTP, dGTP and dTTP; 0.4 Units of Taq DNA polymerase (GibcoBRL). The primer pair used, designed on the basis of the coding cDNAs for rabbit VEGFR-3 (this article) was: for sense 5'-TATGGTACAAAGATGAGAGGC-3' (SEQ ID NO: 5), and for antisense 5'-ACAGGTATTCACATTGCTCCT-3' (SEQ ID NO: 6). The PCR with this pair of primer yielded 362bp reaction product, and was tested with cDNAs of various rabbit tissues (lung, liver, mesentery, lymph nodes) to test the specificity before proceeding to the quantitative RT-PCR. In order to quantify the VEGFR-3 mRNA product in both VEGF-C treated and control ears, we used the "competimer" quantitative PCR technique: VEGFR-3 cDNA and 18S cDNA were co-amplified at the same time for each sample. In the same mix with VEGFR-3 PCR we added a mix of 18S primer pair/18S 3'-end modified primers (competimers) at a ratio of 1/9 (Ambion, Austin, Texas), yielding a -488-bp product. After forty cycles of PCR with the above condition, PCR products were separated on agarose gel containing ethidium bromide and quantified by using integrated density analysis software (~~EagleSight~~EAGLESIGHT™ Software 3.2, Staratagene, La Jolla, CA, USA). RT-PCR and relative quantification of PCR products were performed at least three times on samples from both treated and contralateral ears(n=5 in each group) .--